In other words, the output initiation instruction monitor module 21a monitors through the parallel communication I/O interface 19b whether the trigger outputted by the implementation of the output initiation instruction module 33a is received or not. When the module confirms the received trigger, the status information acquisition module 21b on the host side starts and receives, in the predetermined communication mode through the parallel communication I/O interface 19b, the binary status information data outputted by the status information output module 33c of the printer 30. This received data is written in the registry 22 by the status information acquisition module 21b on the host side. In the meantime, the status information acquisition module 21b on the host side is holding two-way communication in the predetermined communication mode with the printer 30. This communication mode is written in the registry 22 as the status information on the printer 30. To be precise, the codes indicating "ECP", "Nibble", etc are written as the communication modes in the registry 22.

Using the status information written in the registry 22, the printing data generation module 21c creates the images showing the status, and then generates the printing data file 50. The status information data acquired by the status information acquisition module 21b on the host side is binary, and therefore need to be images corresponding to the meaning of

the status information data based on the character code. For

this reason, the hard disk drive 15 on the host computer 10

contains the status sheet default file 51 as the form data for

the printing images.

Fig. 4 shows the flow of the printing data file generation

processing and the outline of the printing images. Using an AP

(application program interface), the printing data generation

module 21c generates the printing job instance, then reproduces,

on the basis of the status sheet default file 51, the form of

the printing images as shown in Fig. 4 for the printing job

instance. Then, the printing data generation module 21c

generates the character string corresponding to the status shown

by the status information data on the basis of the status

information that is written in the registry 22. Using the text

output API, the module also superposes the character string

images on the predetermined location of the printing image form

that is already reproduced in the printing job instance. As a

result, the printing images, as shown in Fig. 4(a), are generated,

and then the dot image data is spooled as the printing data file

50.

The generated printing data file 50 is outputted from the

parallel communication I/O interface 19b by the printing data

output module 21d in the same way as the normal printing job.

As a result, the printing data file 50 is received under the

control of the printing module 33d, and then the status
information is outputted on the printer 30.

The following is the processing flow implemented by each
module of the firmware of the printer driver 21 and the printer
30. Fig. 5 shows the main processing flow of the status
information printing while the printer 30 is being driven. The
step S100, which is the status information acquisition
processing on the printer's side, performs the status
information acquisition processing at the step S100 when the
printer 30 is booted and the status is updated. The printer 30,
usually in a standby state when printing is not performed, begins
the appropriate processing when the status information output
initiation instruction is performed or the printing job is
inputted from the host computer 10. In other words, the status
information output processing at the step 200 confirms whether
the switch 36 is pushed, and the print processing at the step
300 confirms whether the printing job is inputted from the host
computer 10.

Fig. 6 shows the processing flow of the status information
acquisition on the printer's side at the step 100. The step 110
confirms whether the printer 30 is in the state that is
immediately after the booting. In other word, in this embodiment
there is the status information acquired only after the booting.
When the step S110 confirms the printer 30 in the state which